What is claimed is:

1. An image recording system, particularly for use in a motor vehicle, comprising at least one image sensor, at least one optical unit, at least one housing and fastening means for fixing the image sensor in position relative to the housing, the housing having means for accommodating the optical unit, the housing having alignment means on the inside which make it possible to align the main axis of the image sensor and the main axis of the optical unit relative to each other.

2. The image recording system as recited in Claim 1,
wherein the alignment means permit an attachment-free, axial alignment of the main axis of the image sensor and the main axis of the optical unit relative to each other.

3. The image recording system as recited in one of the preceding claims,
wherein the means of the housing for accommodating the optical unit is a threaded mount.

4. The image recording system as recited in one of the preceding claims,
wherein the image sensor is arranged on a printed circuit board, the printed circuit board preferably being able to be positioned by second alignment means, in particular at least by at least one spacer, relative to the housing.

5. The image recording system as recited in one of the preceding claims,
wherein the fastening means for fixing the image sensor in position relative to the housing is adhesive agent and/or at least one screw-connection means and/or at least one clamping-connection means, in particular at least one tension spring.

6. The image recording system as recited in one of the preceding claims,
wherein at least one part of the first alignment means is adjustable.

7. The image recording system as recited in one of the preceding claims,
wherein the first alignment means has at least three spacers for setting the image sensor apart from the housing, preferably at least two of the at least three spacers being adjustable in the spacing direction.

8. The image recording system as recited in one of the preceding claims, wherein the image sensor is disposed on an intermediate support (49) supported in a ball bearing.

9. The image recording system as recited in one of the preceding claims, wherein the ball bearing is formed from edge areas of the intermediate support that in each case are in the shape of a spherical lateral surface and regions of the housing member (40.1) that are in the shape of a spherical lateral surface, which intermesh with form locking in the interior of the housing member (40.1).

10. The image recording system as recited in one of the preceding claims, wherein the image recording system (50) includes adjusting screws (51) which are braced on one side on the housing (40.1, 44), and on the other side, directly or indirectly on the intermediate support (49).

11. A method for producing an image recording system, in particular an image recording system as recited in one of the preceding claims, an attachment-free, axial alignment of the main axis of an image sensor of the image recording system and the main axis of an optical unit of the image recording system relative to each other being implemented by alignment means mounted on the inner side of a housing of the image recording system; the main axis of the image sensor and the main axis of the optical unit being radially aligned relative to each other as a function of image data of the image sensor in such a way that the image sensor generates the image data from a test pattern located outside of the housing.

12. The method as recited in Claim 11, wherein after axial and/or radial alignment of the image sensor, the image sensor is fixed in position relative to the housing by fastening means, the fixation being implemented, for example, by adhesive agent and/or at least one screw-connection means and/or at least one clamping-connection means, in particular at least one tension spring.

13. The method as recited in one of Claims 11 or 12, wherein the image sharpness is set as a function of the image data from the test pattern by adjusting the position of the optical unit in the housing of the image recording system using an adjusting mechanism.

14. The method as recited in one of Claims 11 through 13,
wherein as a function of the image data from the test pattern, at least one adjustment parameter of the image sensor, e.g., at least one adjustment parameter for the intrinsic calibration and/or at least one adjustment parameter of the fixed pattern noise correction, is ascertained and optionally set.